

**Title:** AWARENESS REGARDING DOG BITE MANAGEMENT  
AMONG URBAN SLUM PEOPLE

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**Keywords** Knowledge, Dog Bite, Rabies, First Aid, Vaccines

**Abstract** Rabies is a highly fatal communicable but preventable disease. Most of the deaths occurs due to lack of awareness regarding animal bite management

## AWARENESS REGARDING DOG BITE MANAGEMENT AMONG URBAN SLUM PEOPLE

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### ABSTRACT

**Background :** Rabies is a highly fatal communicable but preventable disease. Most of the deaths occurs due to lack of awareness regarding animal bite management.

**Objective of the Study :** To assess the knowledge related to dog-bite and rabies. To know about the awareness of people about anti-rabies vaccines and health services utilization.

**Study design :** Cross-sectional study.

**Setting :** Urban slum of Gaudapali, Burla, Sambalpur.

**Study Subject :** One of the adult person from each family in the urban slum.

**Study Instrument :** A pre-designed pre-tested questionnaires.

**Data Analysis :** It was analyzed with MS Office Excel 2010.

**Result :** Out of 197 study subjects, 39.6% were in the age group 30-40 yrs of age, 50.7% were having primary education and majority 70.6% were female. Almost 90% knew that dog bite causes rabies. Only 40% were aware regarding other animal causing rabies. Only 76.6% study subjects had knowledge of wound washing after dog bite. Only 77% correctly answered about various symptoms of Rabies & its fatality. First aid should be given after dog bite was known to 46.7% subjects. 92.2% were aware of the necessity to attend health facility after dog bite for vaccination. 58% knew that vaccines are available free of cost in the hospital.

**Conclusion :** The awareness regarding dog bite management in various aspects was poor among the study subjects. So there is a need for IEC in this regard.

**Key words :** Knowledge, Dog Bite, Rabies, First Aid, Vaccines

### INTRODUCTION

Rabies is a communicable disease of man which is always fatal. Estimated annual human mortality in India due to rabies is about 30,000.<sup>1</sup> The fear of death linked with bite of a dog is certainly great because of tremendous variable nature of the disease. The stray dogs mainly transmits rabies in India.<sup>2</sup> The dog population in India is estimated to be around 25 million and most of them are not protected against rabies.<sup>3</sup> Because of lack of awareness, wrong beliefs & practices, number of deaths are more even through vaccines are available to prevent death due to rabies.<sup>4</sup>

The present study was undertaken to assess the knowledge regarding various aspects of rabies & dog bite management and the awareness among the people regarding availability of the vaccines.

### MATERIALS & METHODS

It was a community based cross-sectional study conducted in the urban slum of Gaudapali, Burla in the district of Sambalpur. The study period was from July 2016 to October 2016. The study subjects were the adult family members. Only one adult family member is included as study subject from each family. The family was selected randomly. The locked households have been excluded. After

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explaining the objective of the study, the verbal consent was taken. The data was collected in pretested and pre-designed questionnaires. It was analyzed with Window MS Office Excel 2010.

## RESULT

A total of 197 study subjects participated in the present study. Out of 197, 78 (39.6%) were in the age group of 30-40 years and 66 (33.5%) were in the age group 40-50 yrs. Almost half of study subjects i.e. 100 (50.7%) were having primary education and 70 (35.5%) had secondary education. Very few participants, 10 (5%) had college level education. Among the respondents majority i.e. 139 (70.6%) were female.

Almost 90% knew that dog bite causes rabies. Only 79(40.1%) had knowledge regarding other animal bites cause rabies. Most of the participants i.e. 151 (76.6%) had proper knowledge regarding wound washing after dog bite. The wound treatment with povidone iodine was known to only 6 (3%) of study subjects. Knowledge regarding Tetanus Toxoid (TT) injection was known to 71(36%). 152(77.1%) had correctly answered the various symptoms of rabies. First aid should be given after dog bite as soon as possible was known to 92 (46.7%). 183 (92.9%) were aware of attending health facility after dog bite. Among them 51(66.2%) knew that vaccines were available free of cost in the hospital.

## DISCUSSION

Almost 90% had knowledge regarding dog bite as cause of rabies which is the similar findings with

**Table I :**  
**Socio-demographic Profile of Study Subjects**

	Variable	No (%)
Age	20-30	45(22.9%)
	30-40	78(39.6%)
	40-50	66(33.5%)
	>=50	8(4%)
Sex	Male	58(29.4%)
	Female	139(70.6%)
Educational Status	Illiterate	3(1.5%)
	Primary	100(50.7%)
	Secondary	70(35.5%)
	Higher-secondary	14(7.3%)
	College	10(5%)

**Table 2**  
**Knowledge regarding various aspects of Dog bite & rabies (n=197)**

	Variable	No (%)
1. Knowledge regarding Dog & other animal bite causing rabies	Present	79(40.1%)
	Absent	118(59.9%)
2. A Knowledge regarding wound washing	Present	151(76.6%)
	Absent	46(23.4%)
3. B Knowledge regarding proper washing (n=92) with Running water only Washed with water and soap/Dettol etc.		47(51%)
		45(49%)
4. Knowledge regarding wound treatment (with Povidone iodine.)	Present	6(3%)
	Absent	191(97%)
5. Knowledge regarding TT injection	Present	71(36%)
	Absent	126(64%)
6. Knowledge regarding sign & symptom of Rabies	Present	152(77.1%)
	Absent	45(22.9%)
7. Knowledge regarding time period of first aid	Present	92(46.7%)
	Absent	105(53.3%)
8. Awareness regarding attending health facility	Present	183(92.9%)
	Absent	14(7.1%)
9. Knowledge regarding availability of vaccine free of cost	Present	113(58%)
	Absent	84(42%)
10. If H/O dog bite in the family(n=77) Attending Health Facility Not attending		51(66.2%)
		26(33.8%)
11. Knowledge regarding time duration for administration of Anti-rabies vaccination	As soon as Possible	68(35%)
	24-48 hrs	0
	after 48 hrs	5(2.5%)
	After 1 wk	124(63%)

Kakrani VA et al.<sup>5</sup> Study conducted in rural population of Gujarat by Singh US, Choudhary SK<sup>6</sup> 98.6% were aware of rabies, 76.6% had knowledge regarding wound washing in this study which is higher than the wound washing practices done by 41.3% cases in the study conducted by P Lai et al.<sup>7</sup> 92.9% were aware of attending the hospital for vaccination which is the finding similar to Kamble B et al.<sup>8</sup> But only 58% knew that vaccines are freely available, which is lack of awareness. The use of Povidone Iodine ointment was known to very few subjects i.e. only in 3% respondents. But



application of home remedies was the practice of a greater percentage of study subjects, which is similar to data given by multi-centric study conducted by M.K. Sudarshan et. al.<sup>9</sup> Though majority had knowledge of attending a health facility, still 8% believed in traditional healers which is a matter of concern.

#### CONCLUSION :

Knowledge regarding dog bite management in relation to various aspects in the prevention of rabies is very poor among the urban-slum people. It needs a lot of IEC activities to increase the awareness among these people which will prevent the death due to dog bite.

#### Declaration-

Funding- Nil

Conflicts of Interest- Nil

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## ANNOUNCEMENT

**The APCRI Newsletter is published every six monthly, in October and in April. APCRI members and the members of the Scientific Community are requested to contribute News Clippings, Photographs and Reports on Scientific activity on Rabies and Related matter for publication in the Newsletter.**

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